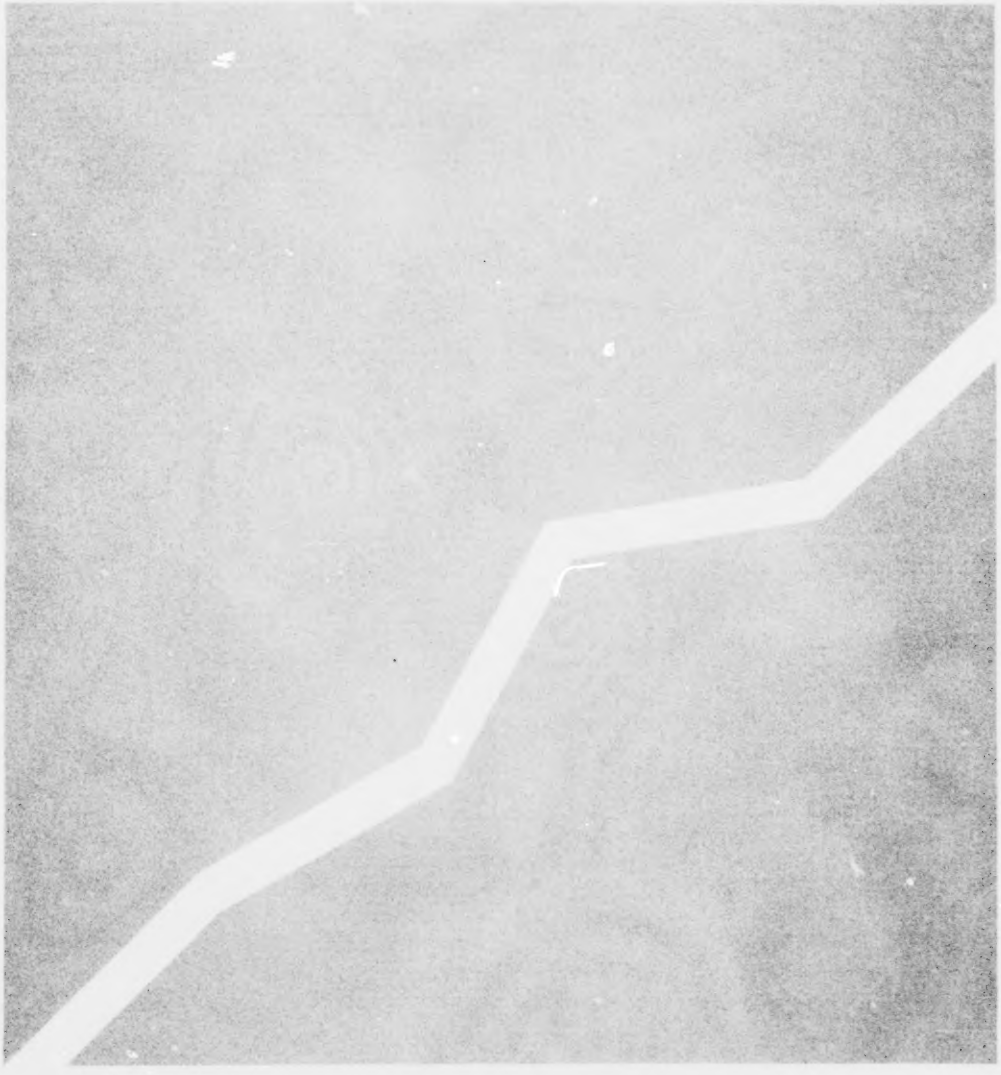
Driver, Vehicle and Traffic Accident Statistics Report — DDVL 1988



Manitoba
Highways and
Transportation
Driver and
Vehicle Licencing

DRIVER, VEHICLE AND TRAFFIC

ACCIDENT STATISTICS REPORT

1988

FOR FURTHER INFORMATION, PLEASE CONTACT:

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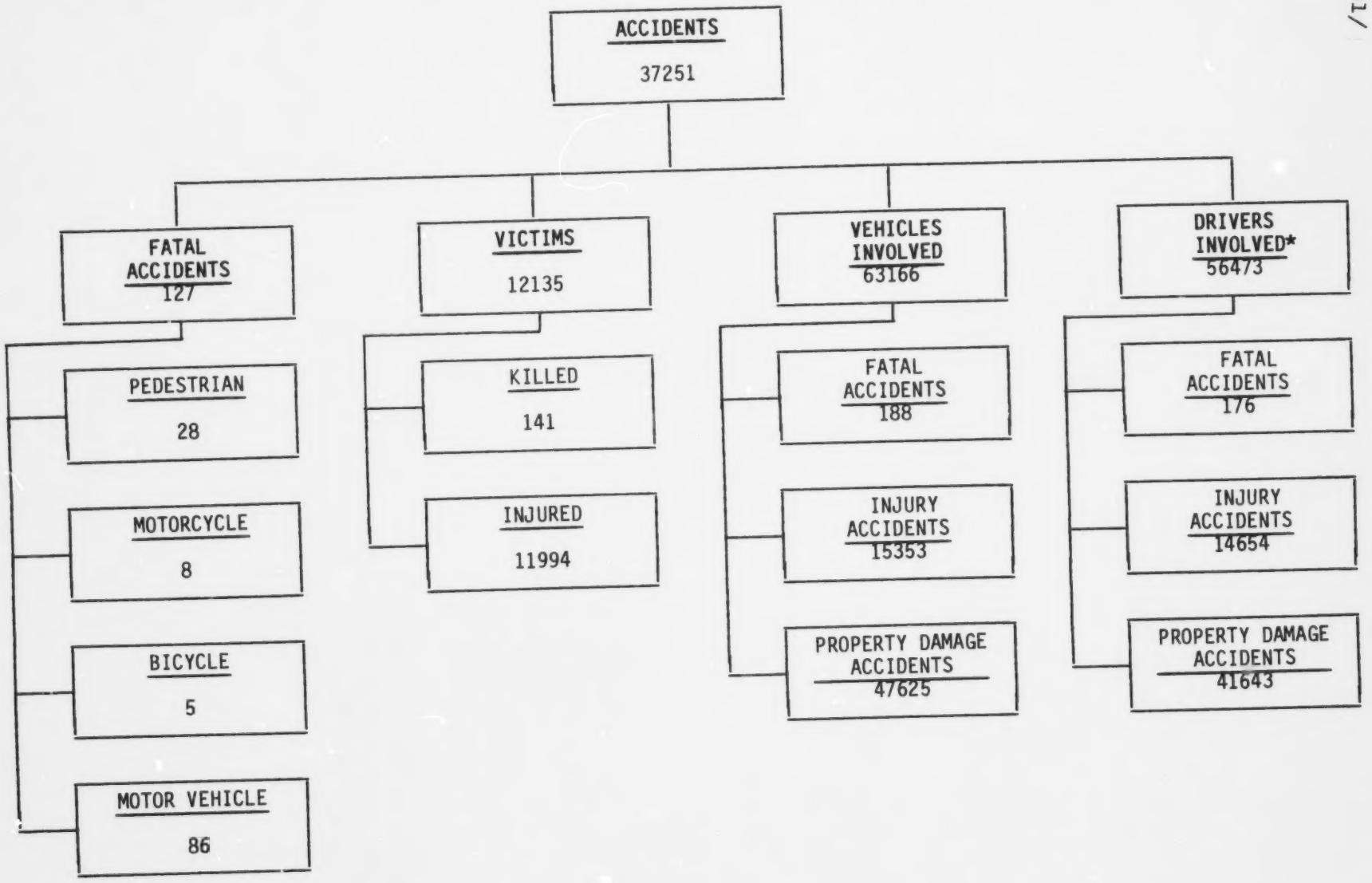
89-06031/

1988 TRAFFIC ACCIDENT CAPSULE SUMMARY



*Drivers involved excludes the following vehicle type categories: bicycle, farm equipment, construction equipment, snowmobiles, trains, off-road vehicles, parked vehicles and pedestrians.

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ABBREVIATIONS, SYMBOLS, DEFINITIONS

P. Damage	Property Damage
M	Male
F	Female
N.S.	Not Stated
K	Killed
I	Injured
%	Percent
+	Plus
-	Minus or Negligible Amount

Fatal Accident - a motor vehicle accident which results in death to one or more individuals within 30 days of accident date.

Injury Accident - a motor vehicle accident which results in non-fatal injury to one or more individuals.

Property Damage Accident - a motor vehicle accident in which damage to vehicle and/or property was $500 or more, and which did not result in death or injury.

SECTION 1

LICENCED DRIVERS

1988

MANITOBA DRIVERS
ACTIVE AND SUSPENDED *
BY AGE AND SEX
1988

DRIVER AGE	SEX	ACTIVE	SUSPENDED
16 - 17	M	11160	319
	F	10155	81
	TOTAL	**21315**	**400**
18 - 19	M	12370	743
	F	11404	79
	TOTAL	**23774**	**822**
20 - 24	M	33050	3748
	F	31403	356
	TOTAL	**64453**	**4104**
25 - 34	M	81802	7268
	F	77530	942
	TOTAL	**159332**	**8210**
35 - 44	M	69512	3613
	F	63945	560
	TOTAL	**133457**	**4173**
45 - 54	M	46767	1943
	F	39722	289
	TOTAL	**86489**	**2232**
55 - 64	M	40853	1307
	F	31109	217
	TOTAL	**71962**	**1524**
65 - 74	M	30650	1064
	F	21522	266
	TOTAL	**52172**	**1330**
75 - 84	M	12595	1158
	F	6130	421
	TOTAL	**18725**	**1579**
> 84	M	1313	993
	F	347	189
	TOTAL	**1660**	**1182**
ALL AGES	M	340072	22156
	F	293267	3400
	TOTAL	**633339**	**25556**

* Active refers to a driver who holds a valid licence which has an expiry date sometime in the future. Suspended refers to a driver whose licence is inactive, with a suspension expiry date in the future.

MANITOBA DRIVERS
ACTIVE AND SUSPENDED
1979 TO 1988

LICENCING YEAR	ACTIVE DRIVERS	SUSPENDED DRIVERS
1979	555663	16969
1980	564657	18900
1981	572095	19864
1982	579813	21087
1983	595952	25564
1984	594100	24139
1985	606798	23338
1986	623406	22069
1987	629298	24524
1988	633339	25556

ANALYSIS OF ACTIVE AND SUSPENDED MANITOBA DRIVERS BY LICENCE CLASS 1988

LICENCE CLASS	ACTIVE DRIVERS MALE	FEMALE	TOTAL	% IN EACH CLASS	SUSPENDED DRIVERS MALE	FEMALE	TOTAL	% IN EACH CLASS
1.0	15073	351	15424	2.4	656	5	661	2.6
1.6*	5031	47	5078	0.8	137	1	138	0.5
2.0	4300	1108	5408	0.9	81	7	88	0.3
2.6*	948	56	1004	0.1	14	0	14	0.0
3.0	9005	360	9365	1.5	361	1	362	1.4
3.6*	2342	25	2367	0.4	67	3	70	0.3
4.0	8076	1850	9926	1.6	557	43	600	2.4
4.6*	2271	115	2386	0.4	73	1	74	0.3
5.0	258822	278666	537488	84.8	17925	2954	20879	81.7
5.6*	30115	3586	33701	5.3	1373	23	1396	5.5
6.0	39	10	49	0.0	9	0	9	0.0
7.0	4050	7093	11143	1.8	903	362	1265	5.0
TOTAL	**340072**	**293267**	**633339**	**100.0**	**22156**	**3400**	**25556**	**100.0**

* .6 refers to a motorcycle licence held in conjunction with another class of licence.

SECTION 2

VEHICLE REGISTRATIONS

1988

VEHICLES REGISTERED
UNDER THE HIGHWAY TRAFFIC ACT
1988

VEHICLE CLASS	CLASS TOTAL	% IN EACH CATEGORY
PASSENGER	519835	64.1
DELIVERY CAR	406	0.1
ANTIQUE	34	0.0
MOTORCYCLE & MOPED	10812	1.3
TRUCK	112513	13.9
FARM TRUCK	63243	7.8
SNOW VEHICLE (H.T.A.)	144	0.0
TRAILER *	103555	12.8
TRACTOR	207	0.0
TOTAL VEHICLES REGISTERED	**810749**	**100.0**
CANCELLATIONS	**95277**	
FINAL TOTAL**	**715472**	

VEHICLES REGISTERED UNDER THE OFF-ROAD VEHICLES ACT

TOTAL VEHICLES REGISTERED	20427
CANCELLATIONS	397
FINAL TOTAL	20030

* INCLUDES 5 YEAR SEMI-TRAILER REGISTRATIONS, AS WELL AS UTILITY TRAILERS.

** VEHICLES REGISTERED AT THE END OF THE REGISTRATION YEAR.

COMMERCIAL VEHICLES REGISTERED
UNDER THE HIGHWAY TRAFFIC ACT
1988

VEHICLE CLASS	CLASS TOTAL	% IN EACH CATEGORY
C.T. TRUCK	23780	45.3
P.S.V. TRUCK	4321	8.2
U-DRIVE CAR AND TRUCK	2543	4.9
DEALER AND REPAIRER	4655	8.9
LIVERY - CITY	453	0.9
LIVERY - COUNTRY	307	0.6
TAXI - CITY	65	0.1
P.S.V. BUS	160	0.3
C.T. TRAILER (INCLUDES SEMI-TRAILER) *	16144	30.8
P.S.V. TRAILER	25	0.0
TOTAL VEHICLES REGISTERED	**52453**	**100.0**
CANCELLATIONS	**4376**	
FINAL TOTAL**	**48077**	

* COMMERCIAL TRAILERS USED IN CONJUNCTION WITH COMMERCIAL TRUCKS. (1988 WAS A NEW PLATE ISSUE YEAR FOR SEMI-TRAILERS)

** VEHICLES REGISTERED AT THE END OF THE REGISTRATION PERIOD.

SECTION 3

TEN YEAR SYNOPSIS

OF TRAFFIC ACCIDENTS

1988

SYNOPSIS

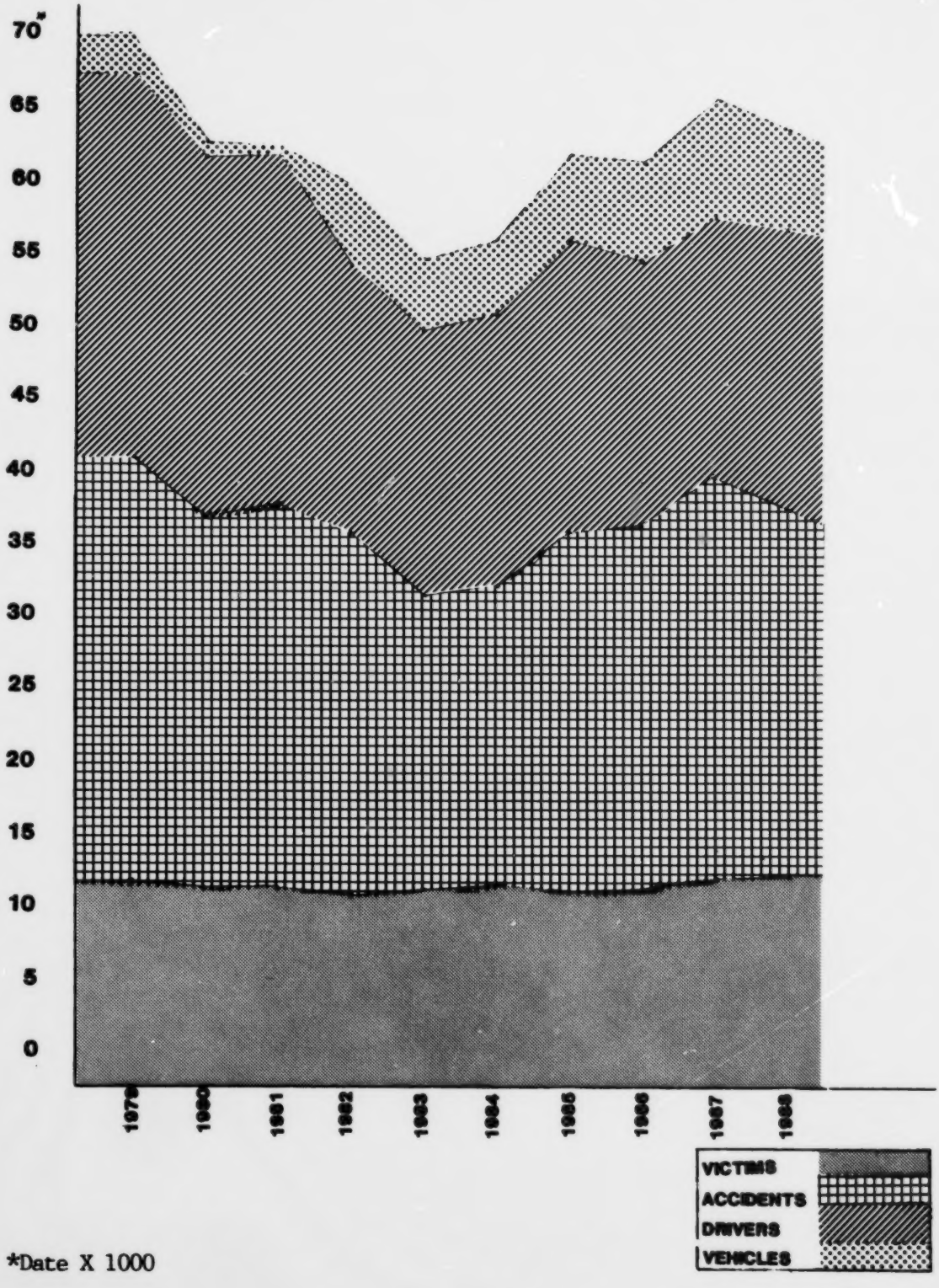
The early 1980's were characterized by a decrease in motor vehicle accidents, and a corresponding decrease in accident victims. This downward trend in accidents, common across Canada, was attributed in part to the recession and consequent reduced number of vehicle miles travelled during this time period throughout the country.

Traffic accidents in Manitoba began an upward swing again in 1985. However, notable decreases of 5.4 percent in total accidents, 8.0 percent in fatal accidents, and 14.6 percent in fatal victims occurred in 1988.

TRAFFIC ACCIDENTS
TEN YEAR SYNOPSIS
1979 - 1988

	1979	1980	1981	1982	1983	1984	1985	1986	1987	1988
TOTAL ACCIDENTS	**40077**	**36964**	**37572**	**35057**	**31877**	**32548**	**35861**	**36252**	**39365**	**37251**
FATAL	166	156	168	132	126	112	109	142	138	127
INJURY	7854	7787	7929	7535	7935	7961	7648	8078	8493	8530
PROPERTY DAMAGE	32057	29021	29475	27390	23816	24475	28104	28032	30734	28594
TOTAL VICTIMS	**11659**	**11115**	**11168**	**10460**	**10931**	**11791**	**10817**	**11508**	**12095**	**12135**
KILLED	183	175	198	151	133	127	133	168	165	141
INJURED	11476	10940	10970	10309	10798	11664	10684	11340	11930	11994
TOTAL VEHICLES INVOLVED	**69623**	**63512**	**63437**	**59061**	**54284**	**55786**	**61936**	**61290**	**65317**	**63166**
FATAL	243	225	247	186	175	171	156	212	202	188
INJURY	13962	13645	13910	13310	14085	14131	13823	14523	15242	15353
PROPERTY DAMAGE	55418	49642	49280	45565	40024	41484	47957	46555	49873	47625
TOTAL DRIVERS INVOLVED	**67341**	**61632**	**61770**	**53906**	**49139**	**50450**	**55909**	**54658**	**57572**	**56473**
FATAL	242	224	242	181	169	163	145	196	186	176
INJURY	13608	13298	13576	12773	13424	13366	13186	13866	14505	14654
PROPERTY DAMAGE	53491	48110	47952	40952	35546	36921	42578	40596	42881	41643

GRAPHIC REPRESENTATION
TEN YEAR SYNOPSIS
1979 - 1988



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SECTION 4

TRAFFIC ACCIDENTS

1988

SYNOPSIS

* Total accidents decreased by 5.4%, from 39365 in 1987 to 37251 in 1988. Fatal accidents decreased from 138 to 127, a variance of 8.0%, and property damage accidents decreased 7.0%, from 30734 in 1987 to 28594 in 1988. A slight increase was experienced in injury accidents, which rose 0.4%, from 8493 in 1987 to 8530 in 1988.

* Three months - January, November and February (in descending order) accounted for 32.7% of total accidents occurring in 1988.

* 34.8% of total accidents occurred on either Friday or Saturday.

* 22.6% of total accidents occurred between the hours of 3 p.m. - 6 p.m.

* 32.3% of fatal accidents occurred between the hours of 10 p.m. - 3 a.m.

* In urban areas, motor vehicle to motor vehicle collisions were the primary accident type, accounting for 83.2% of total reportable accidents, while in rural areas, the primary accident type was ran off roadway, at 33.6 percent.

* 39.2% of total accidents occurred between intersections.

* 61.3% of total accidents, and 70.0% of fatal accidents occurred on undivided roadways.

* 54.5% of total accidents occurred on dry road surfaces, while 21.9% occurred under icy conditions.

* 92.9% of total accidents and 96.9% of fatal accidents occurred under good road conditions.

* 85.0% of total accidents occurred during good weather conditions, while snow and rainy conditions were reported for 9.9 percent.

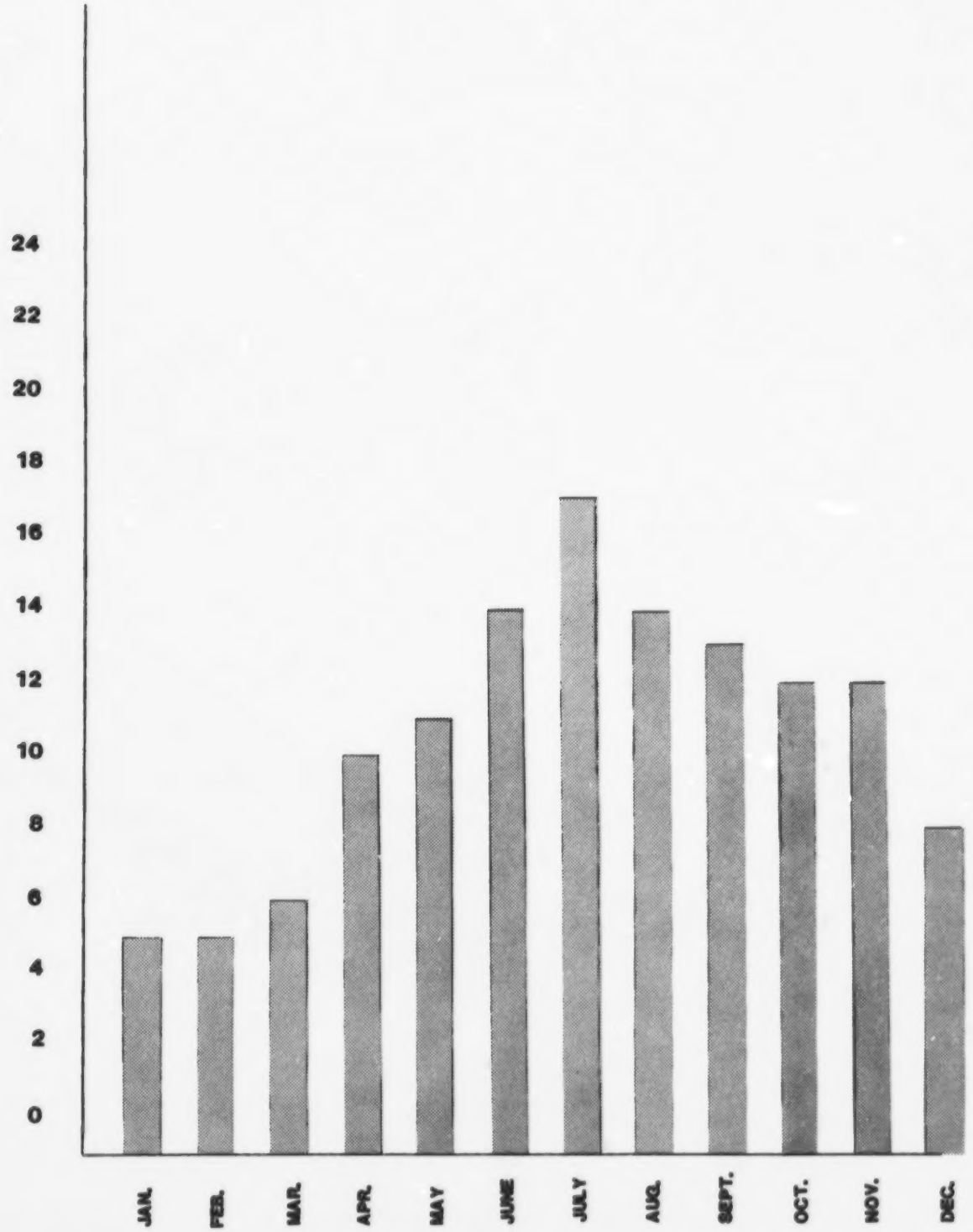
* 62.2% of fatal accidents occurred during daylight conditions.

* 80.0% of total accidents occurred in urban areas; however, urban areas accounted for only 32.3% of all fatal accidents.

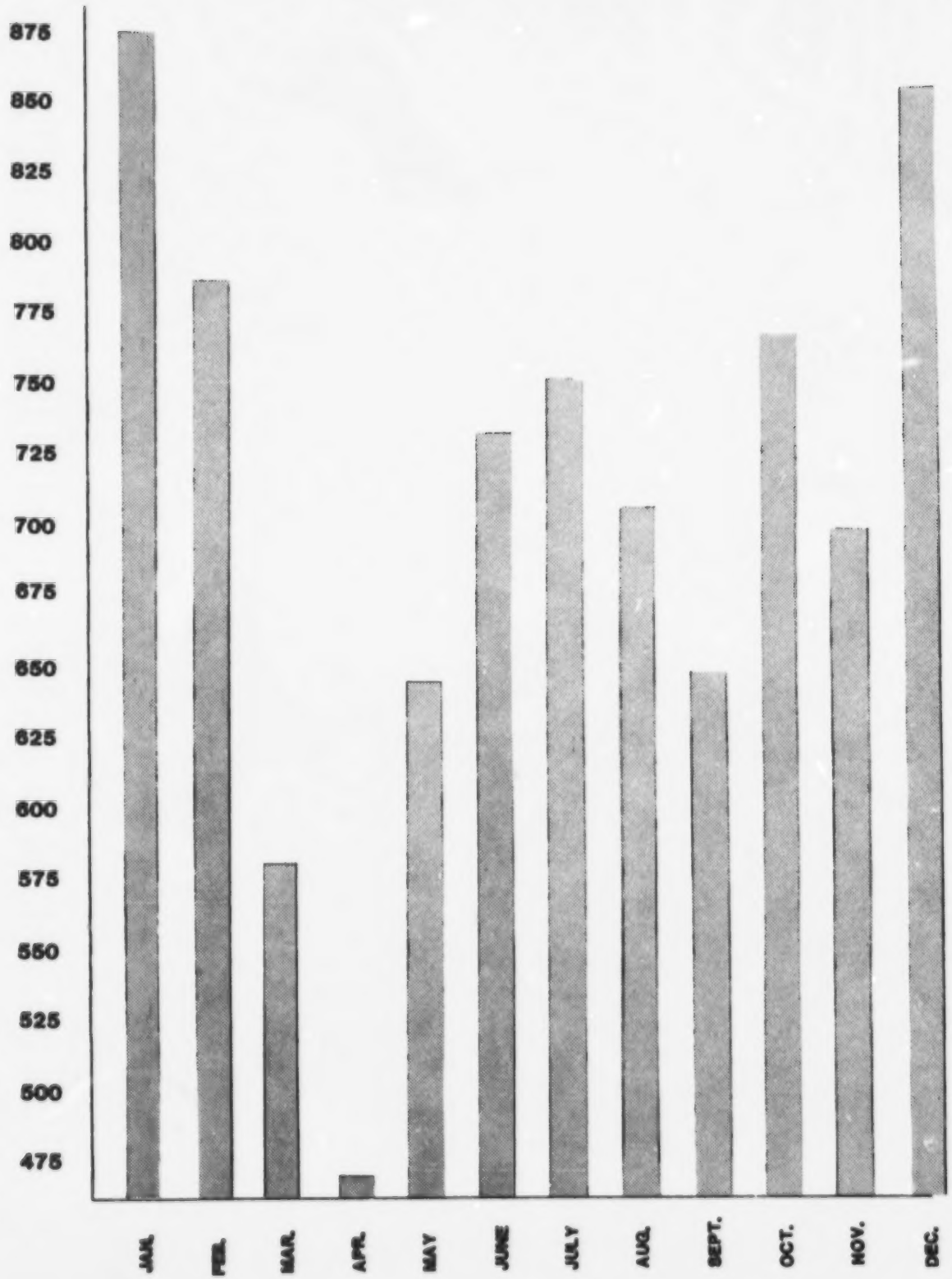
TRAFFIC ACCIDENTS
BY MONTH OF OCCURRENCE AND ACCIDENT TYPE
1988

ACCIDENT MONTH	ACCIDENT TYPE				
	FATAL	INJURY	P. DAMAGE	TOTAL	% EACH CATEGORY
JANUARY	5	877	3581	4463	12.0
FEBRUARY	5	789	2994	3788	10.2
MARCH	6	581	2099	2686	7.2
APRIL	10	470	1521	2001	5.4
MAY	11	644	1844	2499	6.7
JUNE	14	736	2175	2925	7.8
JULY	17	752	2004	2773	7.4
AUGUST	14	709	1993	2716	7.3
SEPTEMBER	13	649	2020	2682	7.2
OCTOBER	12	768	2681	3461	9.3
NOVEMBER	12	698	2643	3353	9.0
DECEMBER	8	857	3039	3904	10.5
TOTAL	127	8530	28594	37251	100.0

GRAPHIC REPRESENTATION
FATAL ACCIDENTS BY MONTH OF OCCURRENCE
1988



GRAPHIC REPRESENTATION
INJURY ACCIDENTS BY MONTH OF OCCURRENCE
1988



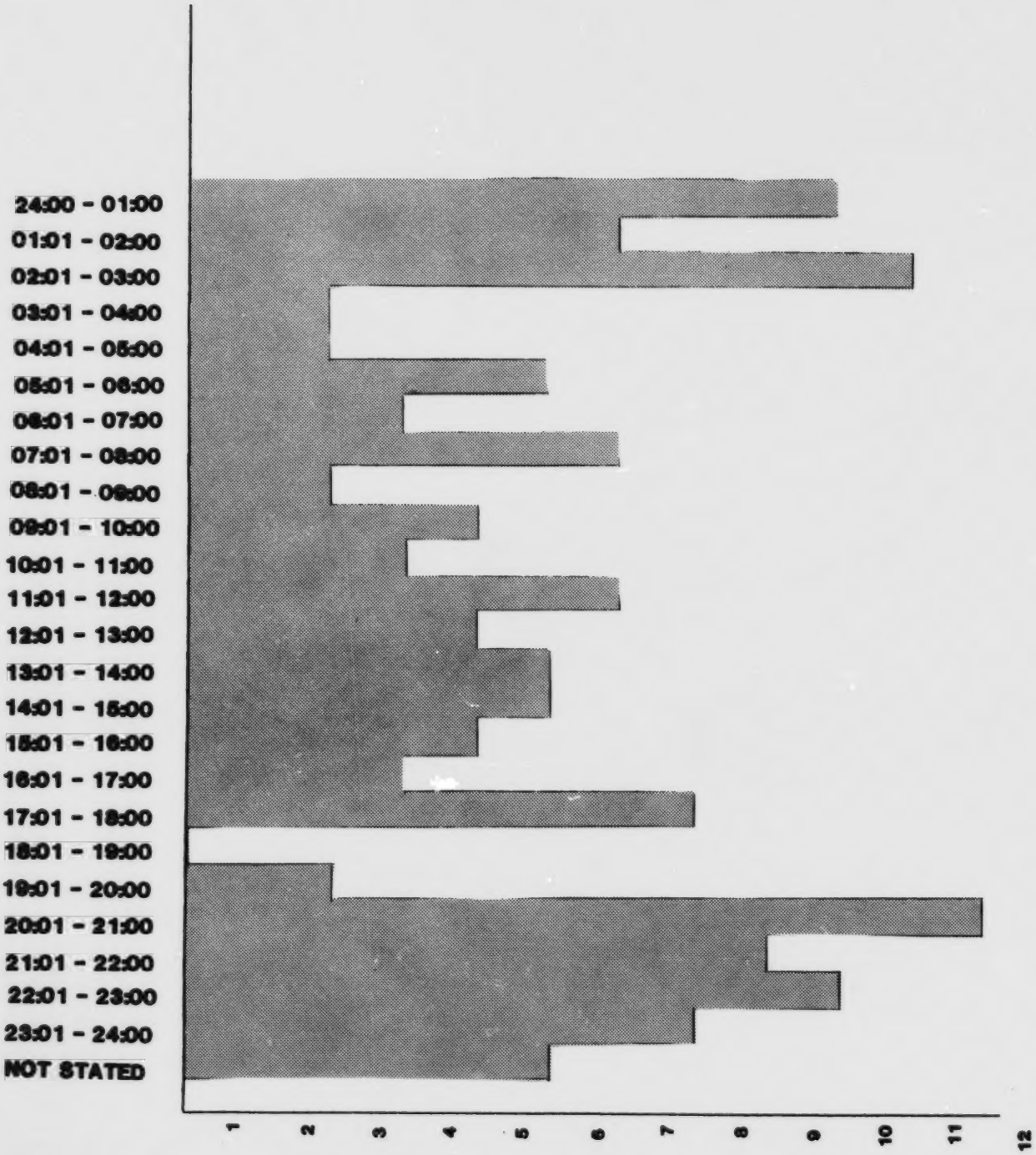
TRAFFIC ACCIDENTS
BY DAY OF OCCURRENCE AND ACCIDENT TYPE
1988

DAY OF WEEK	ACCIDENT TYPE				
	FATAL	INJURY	P. DAMAGE	TOTAL	% EACH CATEGORY
MONDAY	9	1110	3630	4749	12.8
TUESDAY	11	1148	3639	4798	12.9
WEDNESDAY	14	1014	3570	4598	12.3
THURSDAY	9	1217	4003	5229	14.0
FRIDAY	18	1525	5375	6918	18.6
SATURDAY	29	1326	4692	6047	16.2
SUNDAY	32	986	2840	3858	10.4
NOT STATED	5	204	845	1054	2.8
TOTAL	**127**	**8530**	**28594**	**37251**	**100.0**

TRAFFIC ACCIDENTS
BY TIME OF OCCURRENCE AND ACCIDENT TYPE
1988

ACCIDENT HOUR	ACCIDENT TYPE				
	FATAL	INJURY	P. DAMAGE	TOTAL	% EACH CATEGORY
24:00- 1:00	9	197	713	919	2.5
1:01- 2:00	6	187	653	846	2.3
2:01- 3:00	10	238	664	912	2.5
3:01- 4:00	2	102	352	456	1.2
4:01- 5:00	2	73	212	287	0.7
5:01- 6:00	5	83	195	283	0.7
6:01- 7:00	3	125	361	489	1.3
7:01- 8:00	6	298	909	1213	3.3
8:01- 9:00	2	398	1210	1610	4.3
9:01-10:00	4	297	1029	1330	3.6
10:01-11:00	3	368	1204	1575	4.2
11:01-12:00	6	368	1448	1822	4.9
12:01-13:00	4	437	1504	1945	5.2
13:01-14:00	5	468	1670	2143	5.8
14:01-15:00	5	489	1651	2145	5.7
15:01-16:00	4	656	2049	2709	7.3
16:01-17:00	2	802	2244	3048	8.2
17:01-18:00	7	641	1981	2629	7.1
18:01-19:00	0	476	1382	1858	5.0
19:01-20:00	2	400	1394	1796	4.8
20:01-21:00	11	314	1212	1537	4.1
21:01-22:00	8	321	1160	1489	4.0
22:01-23:00	9	295	1172	1476	4.0
23:01-24:00	7	251	1057	1315	3.5
NOT STATED	5	246	1168	1419	3.8
TOTAL	**127**	**8530**	**28594**	**37251**	**100.0**

GRAPHIC REPRESENTATION
FATAL ACCIDENTS BY TIME OF OCCURRENCE
1988



TRAFFIC ACCIDENTS
BY COLLISION AND ACCIDENT TYPE
1988

COLLISION TYPE	ACCIDENT TYPE										
	URBAN			RURAL			PROVINCIAL TOTAL				
	FATAL	INJURY	P. DAMAGE	FATAL	INJURY	P. DAMAGE	FATAL	INJURY	P. DAMAGE	ALL CATEGORIES	% EACH CATEGORY
PEDESTRIAN	21	575	7	7	33	0	28	608	7	643	1.7
MOTOR VEHICLE	8	5054	19729	29	492	1330	37	5546	21059	26642	71.5
TRAIN	0	2	17	1	8	6	1	10	23	34	0.1
MOTORCYCLE	2	170	116	6	50	19	8	220	135	363	1.0
BICYCLE	2	319	17	3	11	2	5	330	19	354	0.9
ANIMAL	0	6	88	2	65	1796	2	71	1884	1957	5.3
FIXED OBJECT	5	428	2548	4	111	450	9	539	2998	3546	9.5
OTHER OBJECT	0	27	134	3	34	113	3	61	247	311	0.8
OVERTURNED IN ROADWAY	0	10	22	4	65	80	4	75	102	181	0.5
RAN OFF ROADWAY	2	128	259	26	913	1562	28	1041	1821	2890	7.8
OTHER NON-COLLISION	1	15	84	1	12	215	2	27	299	328	0.9
COLLISION WITH MOPED	0	1	0	0	1	0	0	2	0	2	0.0
TOTAL	41	6735	23021	86	1795	5573	127	8530	28594	37251	100.0

TRAFFIC ACCIDENTS
BY ACCIDENT SITE TYPE
1988

ACCIDENT SITE TYPE	ACCIDENT TYPE				
	FATAL	INJURY	P. DAMAGE	TOTAL	% EACH CATEGORY
INTERSECTION	35	3946	9084	13065	35.1
BETWEEN INTERSECTIONS	66	3380	11167	14613	39.2
INTERSECTION OF PRIVATE DRIVE	3	172	840	1015	2.7
LANE	1	162	880	1043	2.8
PARKING LOT	0	183	4185	4368	11.7
RAILROAD LEVEL CROSSING	2	26	65	93	0.3
BRIDGE/OVERPASS	5	139	324	468	1.2
TUNNEL/UNDERPASS	0	9	32	41	0.1
OFF-ROAD	4	131	332	467	1.3
NOT APPLICABLE	7	340	1470	1817	4.9
OTHER	0	3	10	13	0.0
UNKNOWN	4	39	205	248	0.7
TOTAL	**127**	**8530**	**28594**	**37251**	**100.0**

TRAFFIC ACCIDENTS
BY ROAD ALIGNMENT AND ACCIDENT TYPE
1988

ROAD ALIGNMENT	ACCIDENT TYPE				
	FATAL	INJURY	P. DAMAGE	TOTAL	% EACH CATEGORY
LEVEL AND STRAIGHT	96	7255	24125	31476	84.5
LEVEL AND CURVE	16	590	1491	2097	5.6
STRAIGHT WITH GRADE	3	219	704	926	2.5
CURVE WITH GRADE	5	162	430	597	1.6
TOP OF HILL	2	55	209	266	0.7
BOTTOM OF HILL	2	60	190	252	0.7
NOT APPLICABLE	0	162	1251	1413	3.8
OTHER	0	0	1	1	0.0
UNKNOWN	3	27	193	223	0.6
TOTAL	**127**	**8530**	**28594**	**37251**	**100.0**

TRAFFIC ACCIDENTS
BY ROAD CATEGORY AND ACCIDENT TYPE
1988

ROAD CATEGORY	ACCIDENT TYPE				
	FATAL	INJURY	P. DAMAGE	TOTAL	% EACH CATEGORY
DIVIDED	31	3295	7882	11208	30.1
UNDIVIDED	94	4920	17836	22850	61.3
RAMP	0	35	99	134	0.4
NOT APPLICABLE	2	256	2550	2808	7.5
OTHER	0	0	10	10	0.0
UNKNOWN	0	24	217	241	0.7
TOTAL	127	8530	28594	37251	100.0

TRAFFIC ACCIDENTS
BY ROAD SURFACE AND ACCIDENT TYPE
1988

ROAD SURFACE	ACCIDENT TYPE				
	FATAL	INJURY	P. DAMAGE	TOTAL	% EACH CATEGORY
ASPHALT	78	3988	13699	17765	47.7
CONCRETE	16	1929	4937	6882	18.5
GRAVEL	22	787	3025	3834	10.3
EARTH/DIRT	1	50	235	286	0.8
PAVED	10	1640	5927	7577	20.3
NOT APPLICABLE	0	113	626	739	2.0
OTHER	0	0	1	1	0.0
UNKNOWN	0	23	144	167	0.4
TOTAL	127	8530	28594	37251	100.0

TRAFFIC ACCIDENTS
BY ROAD CONDITION AND ACCIDENT TYPE
1988

ROAD CONDITION	ACCIDENT TYPE				
	FATAL	INJURY	P. DAMAGE	TOTAL	% EACH CATEGORY
GOOD	123	7907	26557	34587	92.9
DEFECTIVE	1	102	274	377	1.0
UNDER REPAIR	1	32	95	128	0.3
UNDER CONSTRUCTION	0	90	193	283	0.8
OBSTRUCTION NOT LIGHTED	0	12	29	41	0.1
HOLE/RUT/BUMP	2	239	562	803	2.2
PAVEMENT DROP OFF	0	7	15	22	0.0
NOT APPLICABLE	0	120	728	848	2.3
OTHER	0	1	1	2	0.0
UNKNOWN	0	20	140	160	0.4
TOTAL	**127**	**8530**	**28594**	**37251**	**100.0**

TRAFFIC ACCIDENTS
BY ROAD SURFACE CONDITION AND ACCIDENT TYPE
1988

ROAD SURFACE CONDITION	ACCIDENT TYPE				
	FATAL	INJURY	P. DAMAGE	TOTAL	% EACH CATEGORY
DRY	96	4917	15294	20307	54.5
WET	8	901	2221	3130	8.4
MUD	1	11	76	88	0.2
SNOW	5	621	2891	3517	9.4
ICE	12	1608	6527	8147	21.9
SLUSH	1	116	321	438	1.2
LOOSE SAND/GRAVEL/DIRT	4	204	371	579	1.6
FRESH OIL	0	4	8	12	0.0
NOT APPLICABLE	0	119	703	822	2.2
OTHER	0	3	4	7	0.0
UNKNOWN	0	26	178	204	0.6
TOTAL	**127**	**8530**	**28594**	**37251**	**100.0**

TRAFFIC ACCIDENTS
BY LIGHT CONDITION AND ACCIDENT TYPE
1988

LIGHT CONDITION	ACCIDENT TYPE				
	FATAL	INJURY	P. DAMAGE	TOTAL	% EACH CATEGORY
DAY	61	5599	17501	23161	62.2
DAWN	4	152	408	564	1.5
DUSK	2	353	1170	1525	4.1
DARK	52	1397	5558	7007	18.8
ARTIFICIAL LIGHTING	8	913	3076	3997	10.7
NOT APPLICABLE	0	102	703	805	2.2
OTHER	0	0	1	1	0.0
UNKNOWN	0	14	177	191	0.5
TOTAL	127	8530	28594	37251	100.0

TRAFFIC ACCIDENTS
BY WEATHER CONDITION AND ACCIDENT TYPE
1988

WEATHER CONDITION	ACCIDENT TYPE				
	FATAL	INJURY	P. DAMAGE	TOTAL	% EACH CATEGORY
CLEAR	91	5882	19939	25912	69.5
CLOUDY	23	1457	4295	5775	15.5
RAINING	4	347	903	1254	3.4
SNOWING	4	473	1847	2324	6.2
FOG OR MIST	2	60	207	269	0.7
SMOKE OR DUST	0	23	48	71	0.2
FREEZING RAIN/SLEET/HAIL	0	33	81	114	0.3
DRIFTING SNOW	1	68	221	290	0.8
STRONG WINDS	0	39	104	143	0.4
NOT APPLICABLE	0	122	763	885	2.4
OTHER	0	0	0	0	0.0
UNKNOWN	2	26	186	214	0.6
TOTAL	**127**	**8530**	**28594**	**37251**	**100.0**

TRAFFIC ACCIDENTS
BY PLACE OF OCCURRENCE AND ACCIDENT TYPE
1988

PLACE OF OCCURRENCE	ACCIDENT TYPE				
	FATAL	INJURY	P. DAMAGE	TOTAL	% EACH CATEGORY
URBAN					
REGIONAL STREETS (WINNIPEG)	36	5837	17299	23172	77.8
URBAN 10,000 & UP (EXCLUSIVE OF WPG)	2	419	2237	2658	8.9
OTHER URBAN	3	479	3485	3967	13.3
TOTAL	41	6735	23021	29797	100.0
RURAL					
PRIMARY HIGHWAY	50	817	2413	3280	44.0
SECONDARY HIGHWAY	18	363	1102	1483	19.9
LOCAL/OTHER ROADS	18	615	2058	2691	36.1
TOTAL	86	1795	5573	7454	100.0
PROVINCIAL TOTAL	127	8530	28594	37251	100.0

TRAFFIC ACCIDENTS
BY EIGHT MOST POPULATED MANITOBA CITIES AND ACCIDENT TYPE
1988

ACCIDENT LOCATION	ACCIDENT TYPE				
	FATAL	INJURY	P. DAMAGE	TOTAL	% EACH CATEGORY
WINNIPEG	36	5837	17299	23172	62.2
BRANDON	0	296	1302	1598	4.3
PORTAGE LA PRAIRIE	1	63	320	384	1.0
FLIN FLON	1	28	227	256	0.7
DAUPHIN	0	36	277	313	0.8
THOMPSON	1	60	615	676	1.8
THE PAS	0	28	183	211	0.6
SELKIRK	0	53	220	273	0.7
OTHER URBAN	2	334	2578	2914	7.8
ALL RURAL	86	1795	5573	7454	20.1
TOTAL	127	8530	28594	37251	100.0

SECTION 5

TRAFFIC ACCIDENT VICTIMS

1988

SYNOPSIS

* Fatal accident victims decreased by 14.5% from 165 in 1987 to 141 in 1988; injury victims increased by 0.5%, from 11930 to 11994.

* The number of vehicle occupant fatal victims decreased by 8.3% in 1988, to 99 from the previous year total of 108.

* Of 99 fatal vehicle occupant victims, 38 or 45.5% were known not to be wearing an available safety device. Seat belt usage was unknown for a further 19.2 percent.

* A total of 30, or 30.3% of fatally injured vehicle occupants were ejected from their vehicles. Three victims (3.0%) were partially ejected.

* Four months - July and September, August and November (in descending order) accounted for 46.8% of all victims fatally injured in traffic accidents.

* 31.9% of fatal victims were killed between the hours of 10 p.m. - 3 a.m.; 35.4% of non-fatal traffic accident victims were injured between the hours of 2 p.m. - 7 p.m.

* Rural roadways accounted for 69.5% of fatal victims, but only 23.9% of injury victims.

* The age group 15 - 34 accounted for 53.9% of fatal victims, and 54.6% of total injury victims.

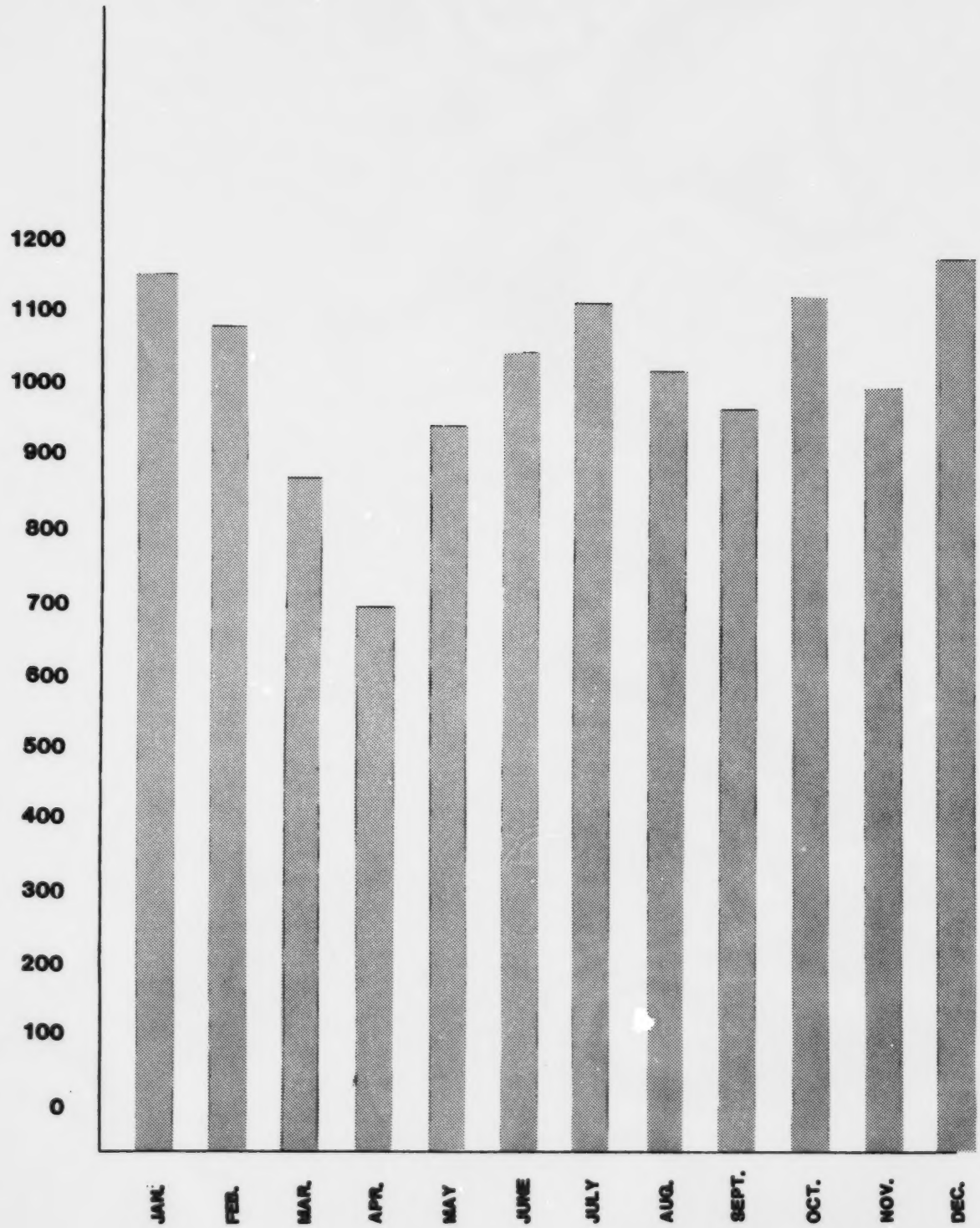
* Total motorcycle victims numbered 264, a decrease of 30.0% from the previous year.

* Of the total 141 fatal accident victims in 1988, 70.2% were vehicle occupants, 19.9% pedestrians, 6.4% motorcyclists and 3.5% bicyclists.

TRAFFIC ACCIDENT VICTIMS
BY MONTH OF OCCURRENCE AND INJURY TYPE
1988

ACCIDENT MONTH	INJURY TYPE			
	KILLED	INJURED	TOTAL	% EACH CATEGORY
JANUARY	5	1154	1159	9.6
FEBRUARY	5	1077	1082	8.9
MARCH	6	867	873	7.2
APRIL	10	678	688	5.7
MAY	13	924	937	7.7
JUNE	15	1023	1038	8.6
JULY	17	1088	1105	9.1
AUGUST	16	994	1010	8.2
SEPTEMBER	17	937	954	7.9
OCTOBER	13	1111	1124	9.3
NOVEMBER	16	971	987	8.1
DECEMBER	8	1170	1178	9.7
TOTAL	141	11994	12135	100.0

GRAPHIC REPRESENTATION
FATAL AND INJURED VICTIMS BY MONTH OF OCCURRENCE
1988



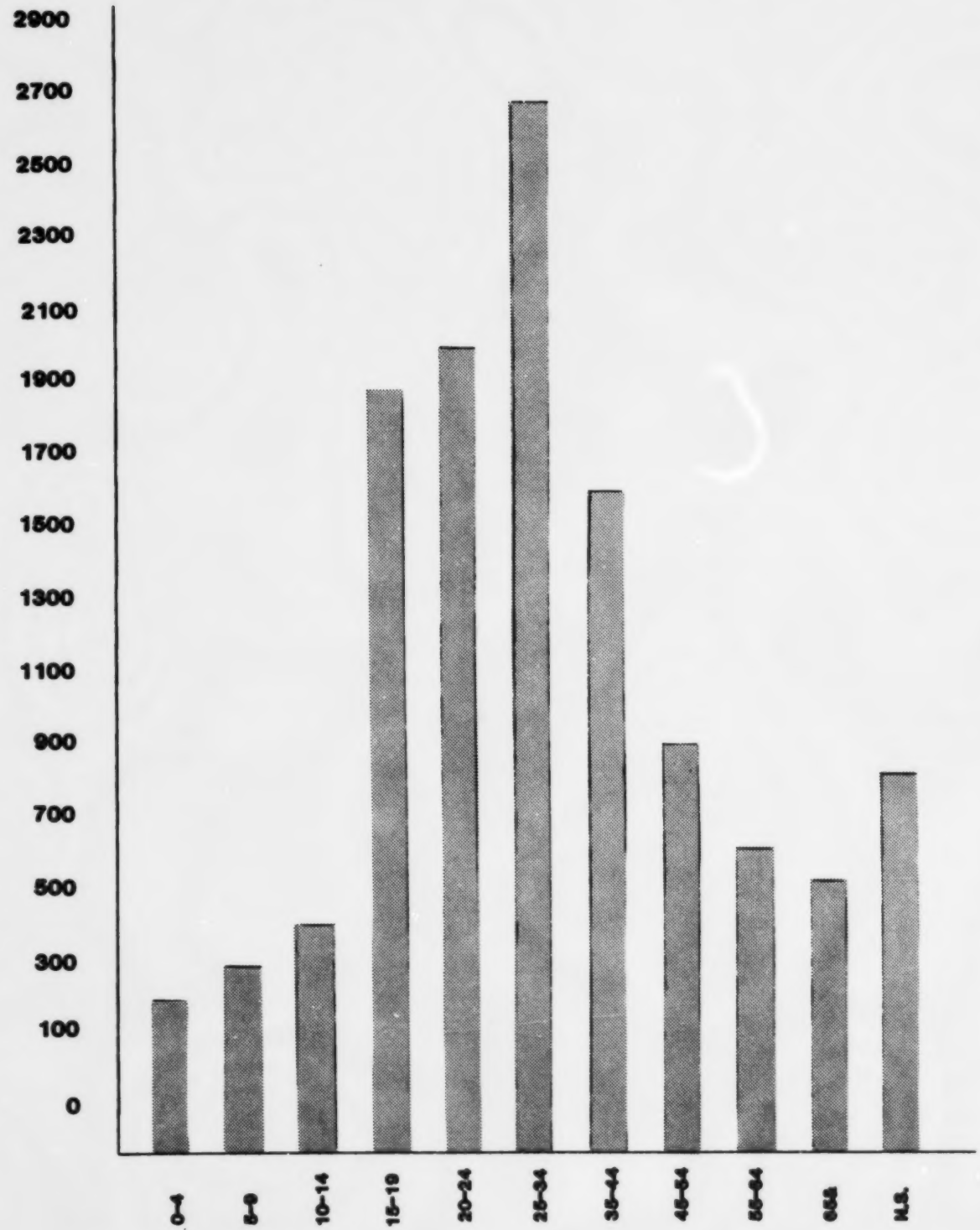
TRAFFIC ACCIDENT VICTIMS
BY HOUR OF OCCURRENCE AND ACCIDENT TYPE
1988

ACCIDENT HOUR	INJURY TYPE			
	KILLED	INJURED	TOTAL	% EACH CATEGORY
24:00- 1:00	10	318	328	2.7
1:01- 2:00	6	287	293	2.4
2:01- 3:00	10	380	390	3.2
3:01- 4:00	2	159	161	1.3
4:01- 5:00	3	106	109	0.9
5:01- 6:00	5	123	128	1.1
6:01- 7:00	4	158	162	1.3
7:01- 8:00	8	398	406	3.4
8:01- 9:00	2	531	533	4.4
9:01-10:00	4	376	380	3.1
10:01-11:00	3	487	490	4.0
11:01-12:00	6	500	506	4.2
12:01-13:00	5	579	584	4.8
13:01-14:00	5	640	645	5.3
14:01-15:00	9	674	683	5.6
15:01-16:00	4	903	907	7.5
16:01-17:00	3	1100	1103	9.1
17:01-18:00	7	886	893	7.4
18:01-19:00	0	687	687	5.7
19:01-20:00	2	575	577	4.8
20:01-21:00	11	452	463	3.8
21:01-22:00	8	488	496	4.0
22:01-23:00	11	449	460	3.8
23:01-24:00	8	359	367	3.0
NOT STATED	5	379	384	3.2
TOTAL	**141**	**11994**	**12135**	**100.0**

TRAFFIC ACCIDENT VICTIMS
BY AGE GROUP AND INJURY TYPE
1988

AGE GROUP	INJURY TYPE							
	KILLED				INJURED			
	MALE	FEMALE	N.S.	TOTAL	MALE	FEMALE	N.S.	TOTAL
0 - 4	2	2	0	4	117	96	2	215
5 - 9	3	1	0	4	172	134	0	306
10 - 14	1	0	0	1	204	218	0	422
15 - 19	14	8	0	22	1054	827	0	1881
20 - 24	15	7	0	22	1120	878	0	1998
25 - 34	26	6	0	32	1443	1228	1	2672
35 - 44	9	1	0	10	756	855	0	1611
45 - 54	8	1	0	9	407	494	0	901
55 - 64	8	7	0	15	290	327	0	617
65+	14	8	0	22	225	306	0	531
AGE NOT STATED	0	0	0	0	436	404	0	840
TOTAL	**100**	**41**	**0**	**141**	**6224**	**5767**	**3**	**11994**

GRAPHIC REPRESENTATION
FATAL AND INJURED VICTIMS BY AGE GROUPS
1988



TRAFFIC ACCIDENT VICTIMS
BY AGE GROUP AND COLLISION TYPE

AGE GROUP

COLLISION TYPE

	PEDESTRIAN		MOTOR VEHICLE		TRAIN		MOTOR CYCLE		BICYCLE		ANIMAL		FIXED OBJECT		OTHER OBJECT		OVER TURNED		RAN OFF ROADWAY		OTHER NON-COLLISION		MOPED		TOTAL	
	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I	K	I
0 - 4	1	35	1	129	0	0	0	1	0	3	0	0	0	8	0	2	1	1	1	34	0	2	0	0	4	215
5 - 9	2	85	0	161	0	0	0	0	2	23	0	3	0	7	0	0	0	2	0	22	0	3	0	0	4	306
10 - 14	0	55	1	199	0	0	0	3	0	63	0	3	0	13	0	5	0	7	0	71	0	2	0	1	1	422
15 - 19	5	79	2	1012	0	2	3	46	0	59	0	5	2	173	1	17	2	31	6	456	1	1	0	0	22	1881
20 - 24	3	53	6	1305	0	1	2	94	1	40	0	16	1	177	1	17	1	24	7	268	0	3	0	0	22	1998
25 - 34	3	71	11	1952	0	4	3	69	0	44	0	32	5	165	0	16	0	21	9	293	1	5	0	0	32	2672
35 - 44	3	44	3	1269	0	1	1	19	0	18	1	11	1	70	0	9	0	16	1	152	0	2	0	0	10	1611
45 - 54	1	38	5	720	1	3	0	4	0	5	0	10	1	23	0	8	0	5	1	84	0	1	0	0	9	901
55 - 64	4	31	6	490	0	0	0	1	1	5	1	4	0	14	0	1	1	1	2	64	0	6	0	0	15	617
65+	6	52	12	381	0	2	0	0	1	2	0	2	0	22	1	3	0	2	2	64	0	1	0	0	22	531
AGE NOT STATED	0	107	0	515	0	2	0	18	0	73	0	4	0	41	0	4	0	3	0	69	0	3	0	1	0	840
TOTAL	28	650	47	8133	1	15	9	255	5	335	2	90	10	713	3	82	5	113	29	1577	2	29	0	2	141	11994

* LEGEND K (Killed) I (Injured)

TRAFFIC ACCIDENT VICTIMS
BY PLACE OF OCCURRENCE AND INJURY TYPE
1988

PLACE OF OCCURRENCE	INJURY TYPE			
	KILLED	INJURED	TOTAL	% EACH CATEGORY
URBAN				
REGIONAL STREETS (WINNIPEG)	38	7900	7938	86.6
URBAN 10,000 & UP (EXCLUSIVE OF WPG)	2	583	585	6.4
OTHER URBAN	3	641	644	7.0
TOTAL	**43**	**9124**	**9167**	**100.0**
RURAL				
PRIMARY HIGHWAY	59	1358	1417	47.7
SECONDARY HIGHWAY	20	579	599	20.2
LOCAL/OTHER ROADS	19	933	952	32.1
TOTAL	**98**	**2870**	**2968**	**100.0**
PROVINCIAL TOTAL	**141**	**11994**	**12135**	**100.0**

TRAFFIC ACCIDENT VICTIMS
BY EIGHT MOST POPULATED MANITOBA CENTRES
1988

ACCIDENT LOCATION	INJURY TYPE			
	KILLED	INJURED	TOTAL	% EACH CATEGORY
WINNIPEG	38	7900	7938	65.4
BRANDON	0	427	427	3.5
PORTAGE LA PRAIRIE	1	77	78	0.6
FLIN FLON	1	31	32	0.3
DAUPHIN	0	41	41	0.3
THOMPSON	1	79	80	0.7
THE PAS	0	38	38	0.3
SELKIRK	0	73	73	0.6
OTHER URBAN	2	458	460	3.8
ALL RURAL	98	2870	2968	24.5
TOTAL	141	11994	12135	100.0

TRAFFIC ACCIDENT VICTIMS
BY SAFETY EQUIPMENT AND INJURY SEVERITY
1988

SAFETY EQUIPMENT	INJURY SEVERITY					
	MINIMAL*	MINOR*	MAJOR*	FATAL*	NOT STATED**	TOTAL
LAP BELT ONLY INSTALLED AND IN USE	625	512	71	2	44	1254
LAP BELT ONLY INSTALLED AND NOT IN USE	72	212	65	5	20	374
SHOULDER BELT ONLY INSTALLED AND IN USE	143	149	21	0	25	338
SHOULDER BELT ONLY INSTALLED AND NOT IN USE	32	38	12	0	4	86
LAP AND SHOULDER BELT ASSEMBLY IN USE	3130	2474	350	33	408	6395
COMBINED BELT INSTALLED BUT NOT IN USE	239	384	170	40	25	858
ONLY LAP PART OF FULL ASSEMBLY IN USE	23	19	1	0	3	46
AIR BAG DEPLOYED	1	1	1	0	0	3
CHILD SAFETY SEAT USED	18	30	5	0	1	54
CHILD SAFETY SEAT INSTALLED BUT NOT USED	5	2	2	0	0	9
SAFETY HELMET WORN	49	105	47	4	2	207
SAFETY HELMET NOT WORN	7	17	10	4	3	41
REFLECTIVE CLOTHING OR ITEM ON PEDESTRIAN	1	1	0	2	0	4
NO SAFETY DEVICE AVAILABLE	82	179	39	0	7	307
NOT APPLICABLE	200	119	36	17	11	383
OTHER	0	0	0	0	0	0
UNKNOWN	381	659	260	34	442	1776
TOTAL	**5008**	**4901**	**1090**	**141**	**995**	**12135**

* MINIMAL INJURY - NO HOSPITAL TREATMENT
* MINOR INJURY - TREATED AND RELEASED
* MAJOR INJURY - ADMITTED TO HOSPITAL
* FATAL INJURY - DEATH WITHIN 30 DAYS OF ACCIDENT
** NOT STATED

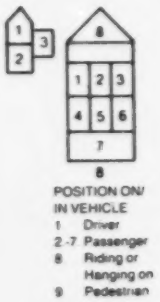
FATAL VEHICLE OCCUPANT VICTIMS*
BY SAFETY EQUIPMENT AND EJECTION
1988

SAFETY EQUIPMENT	VICTIMS	% OF TOTAL	NUMBER OF EJECTIONS
LAP BELT ONLY INSTALLED AND IN USE	2	2.0	
LAP BELT ONLY INSTALLED AND NOT IN USE	5	5.1	4 E; 1 PE
SHOULDER BELT ONLY INSTALLED AND IN USE	0	0.0	
SHOULDER BELT ONLY INSTALLED AND NOT IN USE	0	0.0	
LAP AND SHOULDER BELT ASSEMBLY IN USE	33	33.3	
COMBINED ASSEMBLY INSTALLED BUT NOT IN USE	40	40.4	20 E; 2 PE
NO SAFETY DEVICE AVAILABLE	0	0.0	
UNKNOWN	19	19.2	6 E
TOTAL	**99**	**100.0**	30 E; 3 PE

* THE VEHICLE OCCUPANT CATEGORY EXCLUDES PEDESTRIANS, MOTORCYCLISTS AND BICYCLISTS.

TRAFFIC ACCIDENT VICTIMS
BY POSITION IN VEHICLE AND INJURY SEVERITY
1988

POSITION IN VEHICLE	MINIMAL	MINOR	MAJOR	FATAL	NOT STATED	TOTAL	% EACH CATEGORY
DRIVER OF VEHICLE	3422	2853	578	78	626	7557	62.3
PASSENGER (POSITION #2)	230	277	70	5	58	640	5.3
PASSENGER (POSITION #3)	920	970	191	25	150	2256	18.6
PASSENGER (POSITION #4)	101	171	40	1	16	329	2.7
PASSENGER (POSITION #5)	51	76	18	0	9	154	1.3
PASSENGER (POSITION #6)	159	209	37	3	26	434	3.6
PASSENGER (POSITION #7)	9	33	14	1	1	58	0.5
RIDER/HANGER ON	3	4	1	0	0	8	0.0
PEDESTRIAN	113	308	141	28	109	699	5.7
NOT STATED	0	0	0	0	0	0	0.0
TOTAL	**5008**	**4901**	**1090**	**141**	**995**	**12135**	**100.0**



SECTION 6

PEDESTRIAN ACCIDENT VICTIMS

1988

SYNOPSIS

* Pedestrian accident victims rose by one in 1988, a 3.7% increase from the 1987 total of 27.

* Urban roadways accounted for 75.0% of the 28 pedestrian accident victims killed, and 94.2% of the 671 pedestrians injured in 1988.

* 42.6% of pedestrian victims killed or injured in traffic accidents were crossing the roadway between intersections.

PEDESTRIAN ACCIDENT VICTIMS
BY PEDESTRIAN ACTION AND INJURY TYPE
1988

PEDESTRIAN ACTION	INJURY TYPE			
	KILLED	INJURED	TOTAL	% EACH CATEGORY
CROSSING WITH SIGNAL	1	63	64	9.1
CROSSING AGAINST SIGNAL	3	44	47	6.7
CROSSING NO SIGNAL, MARKED X-WALK	1	22	23	3.3
CROSSING NO SIGNAL OR CROSSWALK	3	61	64	9.2
CROSSING BETWEEN INTERSECTIONS	5	123	128	18.3
WALK ON/ALONG ROAD WITH TRAFFIC	1	17	18	2.6
WALK ON ROAD AGAINST TRAFFIC	0	7	7	1.0
ON SIDEWALK/SHOULDER/MEDIAN	0	17	17	2.4
WALKING ON BRIDGE	0	0	0	0.0
EMERGE FROM BEHIND PARKED VEHICLE	1	38	39	5.6
EMERGE FROM BEHIND MOVING VEHICLE	0	7	7	1.0
GETTING ON/OFF SCHOOL BUS	0	0	0	0.0
GETTING ON/OFF OTHER VEHICLE	0	4	4	0.6
PUSHING/WORKING ON VEHICLE	0	2	2	0.3
RIDING OR HITCHING ON VEHICLE	0	2	2	0.3
PLAYING/AT WORK ON ROADWAY	0	13	13	1.9
HITCH-HIKING ON/ALONG ROADWAY	0	1	1	0.1
NOT APPLICABLE	0	0	0	0.0
OTHER	0	0	0	0.0
UNKNOWN	13	250	263	37.6
TOTAL	**28**	**671**	**699**	**100.0**

PEDESTRIAN ACCIDENT VICTIMS
BY PLACE OF OCCURRENCE AND INJURY TYPE
1988

PLACE OF OCCURRENCE	INJURY TYPE			
	KILLED	INJURED	TOTAL	% EACH CATEGORY
URBAN	21	632	653	93.4
RURAL	7	39	46	6.6
TOTAL	28	671	699	100.0

PEDESTRIAN ACCIDENT VICTIMS
BY ACCIDENT SITE TYPE AND INJURY TYPE
1988

ACCIDENT SITE TYPE	INJURY TYPE			% EACH CATEGORY
	KILLED	INJURED	TOTAL	
INTERSECTION	8	271	279	39.9
BETWEEN INTERSECTIONS	12	286	298	42.6
INTERSECTION OF PRIVATE DRIVE	1	15	16	2.3
LANE	1	22	23	3.3
PARKING LOT	0	40	40	5.7
RAILROAD LEVEL CROSSING	0	0	0	0.0
BRIDGE/OVERPASS	1	3	4	0.6
TUNNEL/UNDERPASS	0	0	0	0.0
OFF-ROAD	0	4	4	0.6
NOT APPLICABLE	1	28	29	4.1
OTHER	0	0	0	0.0
UNKNOWN	4	2	6	0.9
TOTAL	**28**	**671**	**699**	**100.0**

SECTION 7

VEHICLE INVOLVEMENT

1988

SYNOPSIS

* Vehicles involved in traffic accidents in 1988 numbered 64166, a 3.3% decrease from the 1987 total of 65317.

* 76.1% of vehicles involved in traffic accidents in 1988 were passenger vehicles.

* The primary damage location on vehicles in accidents were vehicle front, at 24.2%, vehicle rear (including trunk) at 10.9% and extensive (including several areas) at 10.7 percent.

* Only 0.3% of total vehicles involved in accidents were carrying hazardous loads.

* 53.0% of total vehicles were moving straight ahead when accident involvement occurred. 9.8% were parked, 9.2% were stopped in traffic and 8.5% were making a left-hand turn.

* In fixed object accidents, 29.0% of total vehicles involved collided with a ditch/slope, 11.0% with curbing and 9.2% with a street light standard.

* In non-collision event accidents, 56.6% of total vehicles involved ran off the roadway, 26.2% went into a skid or slide and 7.8% overturned in the roadway.

VEHICLE INVOLVEMENT IN TRAFFIC ACCIDENTS BY VEHICLE TYPE AND ACCIDENT TYPE 1988

VEHICLE TYPE	ACCIDENT TYPE				
	FATAL	INJURY	P. DAMAGE	TOTAL	% EACH CATEGORY
AUTOMOBILE	111	11797	36148	48056	76.1
MOTORCYCLE	8	267	159	434	0.7
BICYCLE	5	335	14	354	0.6
MOPED	0	2	5	7	0.0
SCHOOL BUS	0	14	62	76	0.1
TRANSIT BUS	1	82	147	230	0.4
INTER-CITY BUS	0	1	13	14	0.0
BUS (OTHER)	0	20	58	78	0.1
PICK-UP OR VAN UNDER 5,000 KG	45	2322	9131	11498	18.2
TRUCK OVER 5,000 KG	3	152	636	791	1.3
TRACTOR AND SEMI-TRAILER	7	132	504	643	1.0
MOTORHOME	0	24	105	129	0.2
TRUCK/CAMPER	0	5	35	40	0.1
TRUCK (OTHER)	5	104	424	533	0.8
FARM EQUIPMENT	0	8	33	41	0.1
CONSTRUCTION EQUIPMENT	0	21	85	106	0.2
SNOWMOBILE (ORVA)	0	18	9	27	0.0
SNOW VEHICLE (HTA)	1	2	4	7	0.0
TRAIN/OTHER RAIL VEHICLE	0	0	0	0	0.0
AMBULANCE	0	7	5	12	0.0
FIRE	0	3	12	15	0.0
POLICE/R.C.M.P.	0	20	30	50	0.1
MOBILITY	0	1	1	2	0.0
OFF-ROAD VEHICLE	1	5	1	7	0.0
ALL-TERRAIN VEHICLE	1	10	3	14	0.0
AMPHIBIOUS VEHICLE	0	0	0	0	0.0
DUNE OR SPORT BUGGY	0	0	1	1	0.0
4-WHEEL DRIVE MOTOR VEHICLE	0	1	0	1	0.0
TOTAL	**188**	**15353**	**47625**	**63166**	**100.0**

VEHICLE INVOLVEMENT IN TRAFFIC ACCIDENTS BY VEHICLE YEAR AND ACCIDENT TYPE 1988

VEHICLE YEAR	ACCIDENT TYPE				
	FATAL	INJURY	P. DAMAGE	TOTAL	% EACH CATEGORY
1989	1	27	119	147	0.2
1988	15	833	2831	3679	5.8
1987	16	1323	4313	5652	9.0
1986	28	1479	5011	6518	10.3
1985	15	1303	4120	5438	8.6
1984	10	1210	3820	5040	8.0
1983	10	829	2635	3474	5.5
1982	13	895	2841	3749	5.9
1981	10	1040	3216	4266	6.8
1980 AND OLDER	65	5947	17934	23946	37.9
NOT STATED	5	467	785	1257	2.0
TOTAL	188	15353	47625	63166	100.0

VEHICLE INVOLVEMENT IN TRAFFIC ACCIDENTS
BY TRAFFIC CONTROL AND ACCIDENT TYPE
1988

TRAFFIC CONTROL	ACCIDENT TYPE				
	FATAL	INJURY	P. DAMAGE	TOTAL	% EACH CATEGORY
TRAFFIC SIGNAL/CONTROL	16	4001	7557	11574	18.3
STOP	12	906	2639	3557	5.6
RIGHT TURN ON RED	0	0	13	13	0.0
LEFT TURN ON RED	0	2	9	11	0.0
YIELD	2	303	643	948	1.5
OFFICER/FLAGMAN	0	19	25	44	0.1
MERGE	0	34	61	95	0.2
FOUR-WAY STOP	0	66	129	195	0.3
TURN CONTROLS	0	3	17	20	0.0
FLASHING TURN SIGNAL	0	13	26	39	0.1
OVERHEAD SIGNS	0	2	17	19	0.0
RAILWAY GATES	0	11	13	24	0.0
RAILWAY AUTO CONTROLS	1	10	16	27	0.0
RAILWAY CROSSING	0	30	82	112	0.2
SCHOOL ZONE	0	4	18	22	0.0
WARNING ZONE	0	23	54	77	0.1
PEDESTRIAN CROSSWALK	1	132	162	295	0.5
PEDESTRIAN CORRIDOR	1	120	149	270	0.4
SCHOOL CROSSING	0	4	4	8	0.0
FLASHING SCHOOL SIGNALS	0	4	4	8	0.0
NOT APPLICABLE	143	9325	34667	44135	69.9
OTHER	0	0	0	0	0.0
UNKNOWN	12	341	1320	1673	2.8
TOTAL	**188**	**15353**	**47625**	**63166**	**100.0**

VEHICLE INVOLVEMENT IN TRAFFIC ACCIDENTS BY PRE-COLLISION ACTION AND ACCIDENT TYPE 1988

PRE-COLLISION ACTION	ACCIDENT TYPE				
	FATAL	INJURY	P. DAMAGE	TOTAL	% EACH CATEGORY
GOING STRAIGHT AHEAD	144	9399	23921	33464	53.0
TURNING LEFT	12	1357	4015	5384	8.5
TURNING RIGHT	3	363	1736	2102	3.3
MAKING U-TURN	1	45	176	222	0.3
CHANGING LANES TO LEFT	2	108	533	643	1.0
CHANGING LANES TO RIGHT	1	129	556	686	1.1
MERGING	0	84	243	327	0.5
REVERSING	0	121	2288	2409	3.8
OVERTAKING	6	79	289	374	0.6
STOPPED IN TRAFFIC	2	2149	3685	5836	9.2
START FROM PARKED POSITION/LEAVE ROAD	1	66	426	493	0.8
ENTER PARKED POSITION/ STOP ON ROAD	0	59	287	346	0.6
PARKED	5	308	5843	6156	9.8
SWERVING	2	153	435	590	0.9
NOT APPLICABLE	9	925	3144	4078	6.5
OTHER	0	1	5	6	0.0
UNKNOWN	0	7	43	50	0.1
TOTAL	**188**	**15353**	**47625**	**63166**	**100.0**

VEHICLE INVOLVEMENT IN TRAFFIC ACCIDENTS BY VEHICLE DAMAGE LOCATION AND ACCIDENT TYPE 1988

VEHICLE DAMAGE LOCATION	ACCIDENT TYPE				
	FATAL	INJURY	P. DAMAGE	TOTAL	% EACH CATEGORY
FRONT	44	4278	10984	15306	24.2
ENGINE HOOD	1	36	123	160	0.3
WINDSHIELD	2	40	43	85	0.1
ROOF	1	48	162	211	0.3
REAR, INCLUDING TRUNK	5	2348	4508	6861	10.9
LEFT FRONT FENDER	2	692	4603	5297	8.4
LEFT DOOR(S)	0	289	1870	2159	3.4
LEFT REAR FENDER	1	315	2729	3045	4.8
ENTIRE LEFT SIDE	5	303	1281	1589	2.5
RIGHT FRONT FENDER	5	649	3695	4349	6.9
RIGHT DOOR(S)	4	209	1397	1610	2.6
RIGHT REAR FENDER	0	334	2406	2740	4.3
ENTIRE RIGHT SIDE	5	300	1218	1523	2.4
UNDERCARRIAGE	0	57	411	468	0.7
INTERIOR	0	2	17	19	0.0
EXTENSIVE (SEVERAL AREAS)	86	2603	4015	6704	10.7
NOT APPLICABLE	27	2808	8018	10853	17.2
OTHER	0	4	5	9	0.0
UNKNOWN	0	38	140	178	0.3
TOTAL	**188**	**15353**	**47625**	**63166**	**100.0**

VEHICLE INVOLVEMENT IN TRAFFIC ACCIDENTS BY HAZARDOUS LOAD AND ACCIDENT TYPE 1988

HAZARDOUS LOAD	ACCIDENT TYPE				
	FATAL	INJURY	P. DAMAGE	TOTAL	% EACH CATEGORY
EXPLOSIVES	0	40	102	142	0.2
FLAMMABLE GASES	1	5	23	29	0.1
FLAMMABLE AND CONBUSTIBLE LIQUIDS	1	7	11	19	0.0
FLAMMABLE SOLID/ DANGEROUS WHEN WET	0	1	0	1	0.0
OXIDIZERS AND ORGANIC PEROXIDES	0	0	0	0	0.0
POISONOUS SUBSTANCES/ INFECTIOUS	0	0	0	0	0.0
RADIOACTIVES	0	0	1	1	0.0
CORROSIVES	0	0	2	2	0.0
MISCELLANEOUS DANGEROUS SUBSTANCES	0	1	4	5	0.0
NOT APPLICABLE	186	15285	47418	62889	99.6
OTHER	0	0	0	0	0.0
UNKNOWN	0	14	64	78	0.1
TOTAL	188	15353	47625	63166	100.0

VEHICLE INVOLVEMENT IN TRAFFIC ACCIDENTS
SEQUENCE OF EVENTS BY ACCIDENT TYPE
1988

SEQUENCE OF EVENTS/ COLLISION WITH:	ACCIDENT TYPE				% EACH CATEGORY
	FATAL	INJURY	P. DAMAGE	TOTAL	
FIXED OBJECT	25	1070	3597	4692	7.4
MOVEABLE OBJECT	110	12805	41667	54582	86.4
NON-COLLISION EVENT	23	707	1499	2229	3.5
NOT APPLICABLE	28	651	122	801	1.3
OTHER	2	120	740	862	1.4
UNKNOWN	0	0	0	0	0.0
TOTAL	188	15353	47625	63166	100.0

VEHICLE INVOLVEMENT IN TRAFFIC ACCIDENTS INVOLVING FIXED OBJECTS BY ACCIDENT TYPE 1988

FIXED OBJECT	ACCIDENT TYPE				
	FATAL	INJURY	P. DAMAGE	TOTAL	% EACH CATEGORY
DITCH BOTTOM/SLOPE	14	505	840	1359	29.0
APPROACH	1	17	35	53	1.1
TRAFFIC BARRICADE	0	11	74	85	1.8
SIGN POST	0	39	270	309	6.6
TRAFFIC SIGNAL STANDARD	3	21	104	128	2.7
STREET LIGHT STANDARD	2	90	341	433	9.2
TELEPHONE/POWER POLE	1	87	276	364	7.7
GUARD RAIL	1	43	164	208	4.4
BRIDGE STRUCTURE	1	29	94	124	2.6
TREE/BUSH	1	56	290	347	7.4
PARKING METER	0	0	8	8	0.2
BUILDING/WALL	0	23	220	243	5.2
CURBING	1	74	439	514	11.0
FENCE	0	22	195	217	4.6
CULVERT	0	10	17	27	0.6
SNOW EMBANKMENT DRIFT	0	22	109	131	2.8
ROCK CUT	0	6	21	27	0.6
DELINEATOR POSTS	0	1	16	17	0.4
FIRE HYDRANTS	0	5	41	46	1.0
MEDIAN BARRIER	0	9	43	52	1.1
TOTAL	**25**	**1070**	**3597**	**4692**	**100.0**

VEHICLE INVOLVEMENT IN TRAFFIC ACCIDENTS INVOLVING MOVEABLE OBJECT BY ACCIDENT TYPE 1988

MOVEABLE OBJECT	ACCIDENT TYPE				
	FATAL	INJURY	P. DAMAGE	TOTAL	% EACH CATEGORY
VEHICLE	94	12228	39566	51888	95.1
TRAIN	0	10	22	32	0.0
BICYCLIST	5	317	15	337	0.6
MOTORCYCLE	4	122	67	193	0.4
MOPED	0	2	0	2	0.0
ANIMAL	3	73	1861	1937	3.6
PEDESTRIAN	1	1	2	4	0.0
FARM MACHINERY	0	10	39	49	0.1
CONSTRUCTION MACHINERY	0	22	81	103	0.2
SNOWMOBILE	1	12	7	20	0.0
OFF-ROAD VEHICLE	2	8	7	17	0.0
TOTAL	110	12805	41667	54582	100.0

VEHICLE INVOLVEMENT IN TRAFFIC ACCIDENTS INVOLVING NON-COLLISION EVENT BY ACCIDENT TYPE 1988

NON-COLLISION EVENT	ACCIDENT TYPE				% EACH CATEGORY
	FATAL	INJURY	P. DAMAGE	TOTAL	
RAN OFF ROAD	18	455	789	1262	56.6
OVERTURNED	2	74	98	174	7.8
FIRE/EXPLOSION	0	2	160	162	7.3
SKIDDING/SLIDING	2	170	413	585	26.2
JACK-KNIFING	0	6	39	45	2.0
SUBMERSION	1	0	0	1	0.1
TOTAL	23	707	1499	2229	100.0

SECTION 8

DRIVER INVOLVEMENT

1988

SYNOPSIS

* The highest relative involvement in traffic accidents occurred in the age group 16 - 19, at 178/1000 drivers, and 20 - 24, at 159/1000 drivers. The lowest relative involvement occurred in the age group 65 - 74, at 49/1000 drivers, and 75+, at 50/1000 drivers. The overall relative involvement average for all age groups in 1988 was 89/1000.

* In 1988, 56473 drivers were involved in traffic accidents, a decrease of 1.9% from the 1987 total of 57572.

TRAFFIC ACCIDENT DRIVER INVOLVEMENT BY AGE AND SEX OF DRIVER AND ACCIDENT TYPE 1988

AGE/SEX		ACCIDENT TYPE							
		FATAL	% ALL DRIVERS	INJURY	% ALL DRIVERS	P. DAMAGE	% ALL DRIVERS	TOTAL	% ALL DRIVERS
UNDER 16	M	1		24		51		76	
	F	0		23		18		41	
	NS	0		0		0		0	
	T	1	0.6	47	0.3	69	0.2	117	0.2
16 - 19	M	19		1406		4188		5613	
	F	9		670		1720		2399	
	NS	0		1		1		2	
	T	28	15.9	2077	14.2	5909	14.2	8014	14.2
20 - 24	M	26		1806		4984		6816	
	F	6		883		1976		2865	
	NS	0		1		1		2	
	T	32	18.2	2690	18.4	6961	16.7	9683	17.2
25 - 34	M	42		2716		7526		10284	
	F	7		1397		3354		4758	
	NS	0		3		6		9	
	T	49	27.8	4116	28.1	10886	26.1	15051	26.6
35 - 44	M	19		1606		4863		6488	
	F	4		995		2507		3506	
	NS	0		0		0		0	
	T	23	13.1	2601	17.7	7370	17.7	9994	17.7
45 - 54	M	16		914		2997		3927	
	F	2		472		1306		1780	
	NS	0		1		0		1	
	T	18	10.2	1387	9.4	4303	10.3	5708	10.1
55 - 64	M	9		661		2322		2992	
	F	2		246		747		995	
	NS	0		0		0		0	
	T	11	6.3	907	6.2	3069	7.4	3987	7.1
65 - 74	M	12		395		1413		1820	
	F	0		160		585		745	
	NS	0		0		0		0	
	T	12	6.8	555	3.8	1998	4.8	2565	4.5
75+	M	2		184		618		804	
	F	0		46		165		211	
	NS	0		0		0		0	
	T	2	1.1	230	1.6	783	1.9	1015	1.8
AGE NOT STATED	M	0		3		17		20	
	F	0		0		4		4	
	NS	0		41		274		315	
	T	0	0.0	44	0.3	295	0.7	339	0.6
ALL AGES	M	146		9715		28979		38840	
	F	30		4892		12382		17304	
	NS	0		47		282		329	
	T	176	100.0	14654	100.0	41643	100.0	56473	100.0

TRAFFIC ACCIDENT DRIVER INVOLVEMENT
BY AGE AND SEX AND RELATIVE INVOLVEMENT OF MANITOBA DRIVERS
1988

AGE/SEX		TOTAL DRIVERS INVOLVED	% EACH GROUP	TOTAL ACTIVE DRIVERS	% EACH GROUP	RELATIVE INVOLVEMENT RATE/1000
UNDER 16	M	76		0		
	F	41		0		
	NS	0		0		
	T	117	0.2	0	0.0	
16 - 19	M	5613		23530		
	F	2399		21559		
	NS	2		0		
	T	8014	14.2	45089	7.1	178
20 - 24	M	6816		33050		
	F	2865		31403		
	NS	2		0		
	T	9683	17.2	64453	10.2	150
25 - 34	M	10284		81802		
	F	4758		77530		
	NS	9		0		
	T	15051	26.6	159332	25.2	95
35 - 44	M	6488		69512		
	F	3506		63945		
	NS	0		0		
	T	9994	17.7	133457	21.1	75
45 - 54	M	3927		46767		
	F	1780		39722		
	NS	1		0		
	T	5708	10.1	86489	13.7	66
55 - 64	M	2992		40853		
	F	995		31109		
	NS	0		0		
	T	3987	7.1	71962	11.3	55
65 - 74	M	1820		30650		
	F	745		21522		
	NS	0		0		
	T	2565	4.5	52172	8.2	49
75+	M	804		13908		
	F	211		6477		
	NS	0		0		
	T	1015	1.8	20385	3.2	50
AGE NOT STATED	M	20		0		
	F	4		0		
	NS	315		0		
	T	339	0.6	0	0.0	
ALL AGES	M	38840		340072		
	F	17304		293267		
	NS	329		0		
	T	56473	100.0	633339	100.0	89

TRAFFIC ACCIDENT DRIVER INVOLVEMENT BY DRIVER EXPERIENCE AND ACCIDENT TYPE 1988

DRIVER EXPERIENCE	ACCIDENT TYPE				
	FATAL	INJURY	P. DAMAGE	TOTAL	% EACH CATEGORY
LESS THAN 3 MONTHS	0	177	505	682	1.2
3 TO 6 MONTHS	3	273	758	1034	1.8
7 TO 11 MONTHS	4	223	623	850	1.5
1 TO 2 YEARS	11	1431	4071	5513	9.8
3 TO 5 YEARS	19	1923	5023	6965	12.3
6 TO 10 YEARS	19	2737	7097	9853	17.5
11+ YEARS	52	6637	19987	26676	47.2
NOT STATED	68	1253	3579	4900	8.7
TOTAL	176	14654	41643	56473	100.0

SECTION 9

MAJOR CONTRIBUTING FACTORS

TO ACCIDENT CAUSATION

1988

Major contributing factor data represents the first factor identified by police officers as contributing to accident causation. In 1988, 24866 factors were identified as contributing to 37251 traffic accidents.

HUMAN ACTION

* Major contributing fators under human action, in descending order, were driving too fast for conditions, following too closely and failure to yield right of way.

DRIVER CONDITION

* Under driver condition, major contributing factors were ability impaired by alcohol, had been drinking and extreme fatigue/fell asleep.

VEHICULAR CONDITIONS

* Major vehicular contributing factors were faulty tires, faulty brakes and fire.

ENVIRONMENTAL CONDITIONS

* Under environmental conditions, major contributing factors were slippery surfaces, (wild) animal action and limited or obstructed view.

In total, human action and environmental conditions contributed most significantly to accident causation.

TRAFFIC ACCIDENT DRIVER INVOLVEMENT BY HUMAN ACTION AND ACCIDENT TYPE 1988

HUMAN ACTION	ACCIDENT TYPE							
	FATAL	% EACH GROUP	INJURY	% EACH GROUP	P. DAMAGE	% EACH GROUP	TOTAL	% EACH GROUP
DRIVING TOO FAST FOR CONDITIONS	15	8.5	664	4.5	1758	4.2	2437	4.3
FOLLOWING TOO CLOSELY	0	0.0	592	4.1	1099	2.6	1691	3.0
FAILED TO YIELD RIGHT OF WAY	8	4.6	436	3.0	1192	2.9	1636	2.9
LOST CONTROL/DRIVE OFF ROADWAY	19	10.8	519	3.5	961	2.3	1499	2.7
BACKING UNSAFELY	0	0.0	50	0.3	1268	3.0	1318	2.3
TURNING IMPROPERLY	0	0.0	213	1.5	802	1.9	1015	1.8
CARELESS DRIVING	6	3.4	302	2.1	603	1.5	911	1.6
DISOBEYED TRAFFIC CONTROL DEVICES	4	2.3	342	2.3	507	1.2	853	1.5
DRIVER INEXPERIENCE	2	1.1	180	1.2	420	1.0	602	1.1
CHANGING LANES IMPROPERLY	0	0.0	72	0.5	456	1.1	528	0.9
LEAVE STOP SIGN BEFORE SAFE TO DO SO	3	1.7	170	1.1	343	0.8	516	0.9
PASSING IMPROPERLY	2	1.1	50	0.3	159	0.4	211	0.4
EXCEEDING SPEED LIMIT	9	5.1	81	0.6	76	0.2	166	0.3
PARKING IMPROPERLY	0	0.0	5	0.0	99	0.2	104	0.2
DRIVING WRONG WAY ON ROADWAY	4	2.3	20	0.1	32	0.1	56	0.1
FAILED TO SIGNAL	0	0.0	7	0.1	36	0.1	43	0.1
DRIVERLESS VEHICLE RAN OUT OF CONTROL	0	0.0	7	0.1	28	0.1	35	0.0
PASSING A VEHICLE AT PEDESTRIAN X-WALK	0	0.0	13	0.1	3	0.0	16	0.0
NOT STATED	104	59.1	10931	74.6	31801	76.4	42836	75.9
TOTAL	176	100.0	14654	100.0	41643	100.0	56473	100.0

TRAFFIC ACCIDENT DRIVER INVOLVEMENT BY HUMAN CONDITION AND ACCIDENT TYPE 1988

HUMAN CONDITION	ACCIDENT TYPE				
	FATAL	INJURY	P. DAMAGE	TOTAL	% EACH CATEGORY
LOSS OF CONSCIOUSNESS	1	23	20	44	0.1
EXTREME FATIGUE/ FELL ASLEEP	6	98	95	199	0.4
DEFECTIVE EYESIGHT	0	5	11	16	0.0
DEFECTIVE HEARING	0	0	2	2	0.0
MEDICAL DISABILITY	0	5	10	15	0.0
PHYSICAL DISABILITY	0	5	11	16	0.0
MENTAL DISABILITY	0	0	10	10	0.0
MENTAL CONFUSION/ UNABLE TO REMEMBER	0	12	24	36	0.1
SUDDEN ILLNESS	0	1	2	3	0.0
ABILITY IMPAIRED BY ALCOHOL	14	274	351	639	1.1
ABILITY IMPAIRED BY DRUGS	0	3	11	14	0.0
HAD BEEN DRINKING	15	202	252	469	0.8
NOT STATED	140	14026	40844	55010	97.5
TOTAL	176	14654	41643	56473	100.0

VEHICLE INVOLVEMENT IN TRAFFIC ACCIDENTS BY VEHICULAR DEFECT AND ACCIDENT TYPE 1988

VEHICULAR DEFECT	ACCIDENT TYPE				
	FATAL	INJURY	P. DAMAGE	TOTAL	% EACH CATEGORY
NO APPARENT DEFECT	184	15132	46958	62274	98.6
BRAKES	0	49	145	194	0.3
STEERING	0	20	31	51	0.1
HEADLIGHTS	2	21	7	30	0.1
TAIL LIGHTS	0	7	13	20	0.0
OTHER LIGHTING	0	6	12	18	0.0
ENGINE CONTROLS/ POWER TRAIN	0	17	71	88	0.1
SUSPENSION OR WHEEL FAILURE	1	13	34	48	0.1
TIRES	1	75	127	203	0.3
TOW HITCH	0	2	24	26	0.1
EXHAUST SYSTEM	0	1	2	3	0.0
HOOD/TAILGATE	0	1	11	12	0.0
INSECURED LOAD/OVERLOADED	0	6	37	43	0.1
VEHICLE MODIFICATIONS	0	1	2	3	0.0
FIRE	0	2	151	153	0.2
TOTAL	**188**	**15353**	**47625**	**63166**	**100.0**

VEHICLE INVOLVEMENT IN TRAFFIC ACCIDENTS BY ENVIRONMENTAL CONDITION AND ACCIDENT TYPE 1988

ENVIRONMENTAL CONDITION	ACCIDENT TYPE				
	FATAL	INJURY	P. DAMAGE	TOTAL	% EACH CATEGORY
ANIMAL ACTION-WILD	1	118	1812	1931	3.1
ANIMAL ACTION-DOMESTIC	2	36	175	213	0.3
SURFACE SLIPPERY	15	1169	3880	5064	8.0
SNOW DRIFT	0	24	95	119	0.2
OBSTRUCTION/DEBRIS	1	23	104	128	0.2
VIEW OBSTRUCTED/LIMITED	2	191	469	662	1.1
GLARE	2	55	85	142	0.2
CONSTRUCTION ZONE	0	33	57	90	0.1
DEFECTIVE ROAD SURFACE	1	133	234	368	0.6
SHOULDERS DEFECTIVE	0	16	37	53	0.1
LANE MARKINGS INADEQUATE	0	0	10	10	0.0
TRAFFIC CONTROL DEVICE NOT WORKING	0	2	12	14	0.0
WIND	0	18	33	51	0.1
PEDESTRIAN CORRIDOR IN USE	0	13	16	29	0.0
NOT STATED	164	13522	40606	54292	86.0
TOTAL	188	15353	47625	63166	100.0